Claims

1.   A preference evaluation system comprising:

a data store component for storing schematized data;

a compiler to compile applications including end-user specified preferences and store them in the data store; and

an execution engine to evaluate preferences stored in the data store upon the occurrence of one or more events.

2.   The system of claim 1, further comprising an action component for taking one or more actions specified by a conditionally valid preference.

3.   The system of claim 2, the action component comprising a notification component that transforms and formats notification data generated by the execution engine based on a user preference for one or more user communication devices.

4.   The system of claim 1, wherein the communication devices include a mobile phone, a pager, a PDA, and a computer.

5.   The system of claim 1, further comprising an event component to extract event data from an event source and store the data in the data store.

6.   The system of claim 5, wherein the event source is a subscription service.

7.   The system of claim 5, wherein the event source is the data store component.

8.   The system of claim 1, further comprising a context analyzer to produce context data indicative of an end-users context at a given time and store the context data in the data store.

9.   The system of claim 1, further comprising one or more APIs to interact with applications.

10.   The system of claim 1, wherein the compiler can compile and the execution engine can execute both heavyweight applications and lightweight preference applications.

11.   The system of claim 1, the execution engine evaluates preferences by executing queries on data stored in the data store.

12.   The system of claim 1, wherein end-user preferences are based on a developer specified schema.

13.   The system of claim 12, wherein information regarding end-user preferences and the developer schema are stored in one or more tables in the data store.

14.   A method for application installation comprising:

        establishing a set of base tables; and

        updating the base tables with application data associated with an application being installed.

15.   The method of claim 14, wherein the application is employs user defined preferences.

16.   The method of claim 14, wherein application data includes application procedures that are stored as data.

17.   A computer readable medium having instructions stored thereon for carrying out the method of claim 14.

18.   A method for employing preferences comprising:

        specifying user preferences based on a developer schema;

storing the preferences in one or more tables in a data store;

querying the tables in the data store upon occurrence of an event;

producing a result table; and

executing actions based on the data in the result table.

19.   The method of claim 18, wherein user preferences are specified by utilizing a one-at-a-time declarative programming model.

20.   The method of claim 19, wherein user preferences are specified using one or more On-event-If-Then statements and Boolean operators to specify conditions and actions

21.   The method of claim 20, wherein querying the tables comprises executing query language statements.

22.   The method of claim 19, wherein the developer schema is an XML schema.

23.   A computer readable medium having instructions stored thereon computer executable instructions for executing the method of claim 19.